



**SLOVENSKI STANDARD**  
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**01-december-2024**

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**Stalni upori za elektronsko opremo - 8. del: Področna specifikacija - Fiksni upori za površinsko montažo**

Fixed resistors for use in electronic equipment - Part 8: Sectional specification - Fixed surface mount resistors

Festwiderstände zur Verwendung in Geräten der Elektronik - Teil 8: Rahmenspezifikation - Oberflächenmontierbare (SMD) Festwiderstände

Résistances fixes utilisées dans les équipements électroniques - Partie 8: Spécification intermédiaire - Résistances fixes pour montage en surface

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NORME EUROPÉENNE  
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English Version

**Fixed resistors for use in electronic equipment - Part 8: Sectional  
specification - Fixed surface mount resistors  
(IEC 60115-8:2023)**

Résistances fixes utilisées dans les équipements  
électroniques - Partie 8: Spécification intermédiaire -  
Résistances fixes pour montage en surface  
(IEC 60115-8:2023)

Festwiderstände zur Verwendung in Geräten der Elektronik  
- Teil 8: Rahmenspezifikation - Oberflächenmontierbare  
(SMD) Festwiderstände  
(IEC 60115-8:2023)

This draft European Standard is submitted to CENELEC members for enquiry.  
Deadline for CENELEC: 2025-01-03.

The text of this draft consists of the text of IEC 60115-8:2023 (40/2973/CDV).

If this draft becomes a European Standard, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CENELEC in three official versions (English, French, German).  
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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## prEN IEC 60115-8:2024 (E)

### European foreword

This document (prEN IEC 60115-8:2024) consists of the text of document IEC 60115-8:2023, prepared by IEC/TC 40 "Capacitors and resistors for electronic equipment".

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document (doa) dor + 6 months has to be announced at national level
- latest date by which this document has to be (dop) dor + 12 months implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) dor + 36 months conflicting with this document have to be withdrawn (to be confirmed or modified when voting)

This document will supersede EN 60115-8:2012 and all its amendments and corrigenda (if any).

This edition contains the following significant technical changes with respect to the previous edition:

- a) this edition employs a new document structure of the generic specification EN 60115-1:2023, where the tests of prior Clause 4 are given in Clauses 6 to 12 now;
- b) the definitions of product technologies and product classification levels of the generic specification, EN 60115-1:2023, have been adopted;
- c) the preferred styles and their respective dimensions given in Tables 1a and 1b have been reviewed and amended for the presentation of styles and dimensions for rectangular (RR), transverse (RT), and cylindrical (RC) shapes, plus special styles and dimensions for SMD wirewound (RW) resistors in Tables 1 through 4;
- d) the specifications of recommended test boards have been reviewed and amended to support the preferred styles RR, RT and RC in 5.2.2.2, with supporting information on the measurement of temperature rise given in Annex F and Annex G;
- e) the 'periodic-pulse high-voltage overload test' of EN 60115-1:2023, 8.3 has been adopted as default test method in 5.3.8, thereby replacing the legacy test 'periodic-pulse overload test' of EN 60115-1:2023, 8.4;
- f) the revised solderability test of EN 60115-1:2023, 11.1 has been adopted in 5.3.21 and 5.3.22;
- g) the combined solvent resistance test of EN 60115-1:2023, 11.3 has been adopted in 5.3.24;
- h) the 'single-pulse high-voltage overload test' of EN 60115-1:2023, 8.2, applied with the pulse shape 10/700 in 5.3.7, is complemented with the optional alternative provided by the pulse shape 1,2/50 in 5.4.1;
- i) climatic tests for 'operation at low temperature' of EN 60115-1:2023, 10.2, and for 'damp heat, steady state, accelerated' of EN 60115-1:2023, 10.5, have been adopted as optional tests in 5.4.3. and 5.4.4, respectively;

**prEN IEC 60115-2:2024 (E)**

- j) new guidance is provided in 6.2 on the presentation of stability requirements with their permissible absolute and relative deviations;
- k) acceptance criteria for the visual examination have been added in 6.5 and in Annex B;
- l) visual examination for the primary and proximity packaging has been added in 6.5.3 and in 7.2
- m) the periodical evaluation of termination platings has been added as a new topic of quality assessment in 9.8;
- n) a new Annex C has been added to summarize workmanship requirements for the assembly of leaded film resistors, e.g. as given in the prior IEC 61192 series of standards;

Preceding documents on the subject covered by this specification have been:

- EN 140400:2003, EN 140400:1996 + EN 140400:1996/A1:2001 + EN 140400:1996/COR:1997-07
- CECC 40 400:1989-00.

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Fixed resistors for use in electronic equipment –  
Part 8: Sectional specification: Fixed surface mount resistors**

**Résistances fixes utilisées dans les équipements électroniques –  
Partie 8: Spécification intermédiaire: Résistances fixes pour montage en surface**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIXED RESISTORS FOR USE IN ELECTRONIC EQUIPMENT –****Part 8: Sectional specification: Fixed surface mount resistors****FOREWORD**

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IEC 60115-8 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment. It is an International Standard.

This third edition cancels and replaces the second edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) definitions of product technologies and product classification levels of the generic specification, IEC 60115 1:2020, have been adopted;
- b) new style of transverse (RT) resistors has been added in 3.1.5 and 4.2.2 to cover resistors with wide terminals, which have become common in market;
- c) recommended test boards in 5.2.2 have been revised to fit the demands from the market for higher rated dissipation in resistors;